

STATEMENT OF CONSIDERATIONS

REQUEST BY ABB AIR PREHEATER, INC. (ABB) FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER ITS SUBCONTRACT WITH NEW YORK STATE ELECTRIC & GAS CO., THE PARTICIPANT IN COOPERATIVE AGREEMENT NO. DE-FC22-92PC-92642; W(A)-93-024, CH-0783

New York State Electric & Gas Co. (NYSEG) was awarded the above-captioned cooperative agreement under the fourth round of the Innovative Clean Coal Technology Program pursuant to P.L. 101-512 to demonstrate a combination of cost effective emission reduction and efficiency improvement technologies which will allow utilities to comply with the Clean Air Act Amendments of 1990, at the Milliken Station in Lansing, New York. The cooperative agreement resulted from NYSEG's proposal submitted in response to a PON from DOE. Of the thirty-three proposals submitted under the PON, nine were selected for DOE funding.

ABB Air Preheater, Inc., (ABB) is a large business subcontractor of NYSEG and will supply an air preheater designed to serve the needs of a high efficiency, environmentally compliant, fossil fired utility boiler. Specifically, ABB will supply a Q-Pipe® heat pipe air preheater with high thermal effectiveness and a non-leak design. As indicated in response to question 1^{*} of the attached waiver petition, ABB has agreed that NYSEG shall have a non-exclusive irrevocable royalty free license to use subject inventions in the operations of its business. In addition, the cofunders of the project, the Electric Power Research Institute (EPRI), Empire State Electric Energy Research Corporation (ESEERCO) and the New York State Energy Research Development Authority (NYSERDA) shall have the right to obtain a nonexclusive, irrevocable, royalty free license to use or permit others to use subject inventions in the performance of projects. This approach should focus development and ultimate commercialization of this technology as well as simplify administration of the recoupment provisions of the cooperative agreement required by P.L. 98-146.

The total estimated cost of the cooperative agreement is about \$158,607,807 with NYSEG and its subcontractors cost sharing 72 percent of the total agreement cost. ABB is contributing about \$4 million toward subcontract costs, along with the supply of the Q-Pipe® preheater and dedicated support steel. Moreover, as noted above, NYSEG will be required to provide a plan for cost recoupment including royalty sharing with the government, which is subject to approval by the contracting officer. Therefore, the grant of this waiver will facilitate NYSEG's efforts to meet its recoupment obligations under the cooperative agreement with respect to royalty revenue from licensing of the technology.

ABB is technically competent in the field of air preheaters. After ABB's initial acquisition of heat pipe air preheater technology from the Q-dot Company in Garland, Texas, ABB research and development has led to a design for industrial process and utility boiler applications. The most extensive applications have been for air preheaters for fossil fired

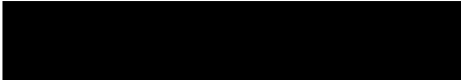
^{*} as amended by ABB letter dated July 26, 1993, attached.

circulating fluid bed boilers and hydrocarbon processing fired heaters. There are 12 heat pipe patents in force owned by ABB, and several articles and air preheater brochures are attached to ABB's waiver petition as evidence of its technical competence in this field.

In addition to its direct cost sharing, according to its response to questions 7 and 8, ABB has invested in background research relevant to the subcontract technology. This investment has been a joint effort with NYSEG in making the correct technical selections to meet the specific needs of this project. Further, about \$250,000 has been invested in a pilot unit now installed at the plant site for evaluation purposes. ABB intends further investment in the technology along with the promotion of the commercial utilization of any invention as a shared effort with NYSEG. This private investment clearly demonstrates ABB's commitment to the technology and indicates a likelihood of an effort to commercialize the results of the subcontract.

ABB has agreed to the standard provisions with respect to invention waivers with the substitution of the march in rights, U.S. manufacturing preference, and U.S. government license provided in 35 U.S.C. 202-204. Additionally, ABB has accepted standard background patent and data provisions of paragraphs (k), (h) and (j) to assure commercialization of the technology, and has agreed to a special provision allowing the government to complete the project in the event ABB is incapable of completing the subcontract.

Considering the foregoing, it is believed that granting the waiver will provide ABB with the necessary incentive to invest its resources in the commercialization of the results of the subcontract in a fashion which will make the subcontract's benefits available to the public in the shortest practicable time. Therefore, in view of the objectives and considerations set forth in 41 CFR 9-9.109-6, all of which have been considered, it is recommended that the requested waiver be granted.


Mark P. Dvorscak
Patent Attorney
Office of Intellectual Property Counsel

Date January 6, 1994

Based on the foregoing Statement of Considerations and the representations in the attached Waiver Petition, it is determined that the interests of the United States and the general public will best be served by a waiver of patent rights of the scope described above and, therefore, the waiver is granted. This waiver shall not apply to any modification or extension of this subcontract, where through such modification or extension, the purpose, scope, or cost of the subcontract is substantially altered.

CONCURRENCE:

Jack S. Siegel
Acting Assistant Secretary
for Fossil Energy

Date 2/9/94

APPROVAL:

Richard E. Constant
Assistant General Counsel
for Intellectual Property, HQ

Date 2/10/94